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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/660,646

09/12/2003

Cassandra M Owen

006601P086

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8791

7590

10/05/2004

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EXAMINER

FULLER, RODNEY EVAN

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/660,646

Applicant(s)

OWEN ET AL.

Examiner

Rodney E Fuller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Rodney Fuller  
Primary Examiner

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Whiting (US 6,377,334).

Regarding claims 1, 9, 15 and 20, Whiting discloses “a multi-zone thermal sensing unit (Fig. 1, ref.# 22) containing a plurality of thermal sensor elements (column 4, lines 17-18) that detect the temperature of a plurality of pre-defined zones (column 3, line 67) on said substrates (Fig. 1, ref.# 20); a multi-zone thermal adjustment unit (Fig. 1, ref.# 10) containing a plurality of thermal coupler elements that adjusts the temperature of said pre-defined zones (column 3, line 67); and a thermal controller unit (Fig. 1, ref.# 12) operatively and communicatively coupled to said multi-zone thermal sensing unit and said multi-zone thermal adjustment unit (Fig. 1, lines connecting ref.#s 10, 12, 24), said thermal controller unit containing logic circuitry (Fig. 2, ref.# 40) to receive information from said multi-zone thermal sensing unit and said multi-zone thermal

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adjustment unit, to process information, and to supply information to said multi-zone thermal sensing unit and said multi-zone thermal adjustment unit, wherein said multi-zone thermal sensing unit communicates detected temperature information to said thermal controller unit, and wherein said thermal controller unit processes said detected temperature information, generates temperature control information based on said processed temperature information (column 2, lines 30-38) , and communicates said temperature control information to said multi-zone thermal adjustment unit to adjust the temperatures of said pre-defined zones (column 2, lines 60-67).”

Regarding claims 2, 7, 10, 13, 16 and 21, Whiting discloses “including an electronic storage device containing expected temperature information for said pre-defined zones.” (column 5, lines 2-4)

Regarding claims 3, 16 and 21, Whiting discloses “wherein said thermal controller unit processes said detected temperature information by including comparisons between said detected temperature information and said expected temperature information stored in said electronic storage device.” (column 5, lines 2-4)

Regarding claims 4, 7 and 13, Whiting discloses “wherein said thermal controller unit generates said temperature control information to adjust the temperatures of said pre-defined zones by determining whether said comparisons between said detected temperature information and said expected temperature information exceed a pre-specified threshold value.” (column 5, lines 60-64)

Regarding claims 5 8, 11 and 14, Whiting discloses “a measurement processing module (Fig. 1, ref.# 22, 24, 26, 28) configured to measure attributes of said substrates and generate substrate attribute information.” (column 4, lines 17-23)

Regarding claims 6, 8, 12, 14, 17 and 22, Whiting discloses “revising said expected temperature information for said pre-defined zones based on said substrate attribute information.” (column 5, lines 61-64)

Regarding claim 15, Whiting discloses “a lithographic apparatus including, an illuminator to provide a projection beam of radiation, a support to hold a patterning device, the patterning device configured to pattern the projection beam according to a desired pattern, a substrate table configured to hold a substrate, and a projection system to expose the patterned beam onto a target portion of the substrate.” (column 2, line 29) (Note: All typical lithographic systems include an illuminator, a support, a reticle, a substrate table and a projection system.)

Regarding claims 18 and 23, Whiting discloses “wherein said at least one processing module is configured as a developer module to develop said wafer, said developer module including an application nozzle to uniformly distribute a solution.” (column 2, line 30)

Regarding claims 19 and 24, Whiting discloses “wherein said wafer track apparatus further includes a rinse module dedicated to rinsing said developed substrate, said rinse module including a cleaning nozzle to distribute a cleaning solution, a spinning plate that receives said developed substrate, and a holding device to firmly attach said developed substrate to said spinning plate.” (column 2, lines 26-30)

Regarding claim 20, Whiting discloses “a measurement processing module (Fig. 1, ref. # 22, 24, 26, 28) to measure attributes of a substrate and generate substrate attribute information at least one processing module configured to chemically process said substrate.” (column 4, lines 17-23)

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***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller  
Primary Examiner  
Art Unit 2851



September 29, 2004